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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,231	03/31/2004	Toshikazu Mochizuki	47434-00057	9143

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EXAMINER

JOHNSON, JONATHAN J

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/816,231

Applicant(s)

MOCHIZUKI, TOSHIKAZU

Examiner

Jonathan Johnson

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 August 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-94 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☒ Claim(s) 1-94 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-30 and 77-94 are drawn to a desoldering apparatus, classified in class 228, subclass 19.
- II. Claims 31-58 are drawn to a retaining the melting solder apparatus, classified in class 29, subclass various.
- III. Claims 59-67 are drawn to a heater cartridge, classified in class 392, subclass various.
- IV. Claims 68-76 are drawn to a method of soldering, classified in class 29, subclass various.

The inventions are distinct, each from the other because of the following reasons:

Inventions Groups I, II, III and Group I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus can be used in adhesive debonding.

Because these inventions are distinct for the reasons given above and the search required for Groups I, II, III is not required for Group II, restriction for examination purposes as indicated is proper.

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Inventions Group I and Groups II and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations. In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the claimed housings and heater cartridges can be used in adhesive debonding. The subcombination has separate utility such as adhesive bonding.

Because these inventions are distinct for the reasons given above and the search required for Group I and Groups II and III, restriction for examination purposes as indicated is proper.

Inventions Group II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention of Group III has separate utility such as adhesive bonding.

Because these inventions are distinct for the reasons given above and the search required for Group II and III, restriction for examination purposes as indicated is proper.

**IF APPLICANT ELECTS GROUP I, THEN APPLICANT MUST ADDITIONALLY  
ELECT ONE OF THE FOLLOWING:**

This application contains claims directed to the following patentably distinct species of the claimed invention:

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- Ia. Claims 2, 3, 9, 11, 15-17, 22, 24 are drawn to the front end and heater cartridge.
- Ib. Claims 4-8 are drawn to the backholder adapted to move between a first and second position.
- Ic. Claims 10, 23, 25, 26 are drawn to a heater cartridge having a particular channel.
- Id. Claims 13, 14, 18-21 are drawn to storage capable of retaining the melted solder.
- Ie. Claims 28-30 and 91 are drawn to a heater cartridge having a transition section.
- If. Claim 27 is drawn to a control box.
- Ig. Claim 78 and 80 is drawn to a cavity.
- Ih. Claims 79 and 90 are drawn to the location of the passage.
- Ii. Claims 82-84 and 94 are drawn to the actuator and trigger.
- Ij. Claim 85 is drawn to a locking mechanism.
- Ik. Claims 87-88 are drawn to a gap.
- Il. Claim 89 is drawn to the location of the heater.
- Im. Claim 93 is drawn to a vacuum source.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1, 12, 77, 81, 86, 92 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

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Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

**IF APPLICANT ELECTS GROUP II, THEN APPLICANT MUST ADDITIONALLY  
ELECT ONE OF THE FOLLOWING:**

This application contains claims directed to the following patentably distinct species of the claimed invention:

- IIa. Claims 32, 48 are drawn to a divot in the housing.
- IIb. Claims 33, 49 are drawn to the shape of the radiating member.
- IIc. Claims 34-35, 40, 50-51, 56-57 are drawn to the orientation of the base and filter.
- IId. Claims 36-37, 52-53 are drawn to the shape of the base.
- IIe. Claims 38-39, 42, 43, 45-46, 54-55, 58 are drawn to the radiator and housing's material.
- IIIf. Claim 41 is drawn to the orientation of the legs.

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Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 31,44, and 47 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

**IF APPLICANT ELECTS GROUP III, THEN APPLICANT MUST ADDITIONALLY  
ELECT ONE OF THE FOLLOWING:**

This application contains claims directed to the following patentably distinct species of the claimed invention:

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IIIa. Claim 60 is drawn to an enclosed pipe end.

IIIb. Claims 61, 66 are drawn to the transition section.

IIIc. Claims 62, 65 are drawn to a channel.

IIId. Claim 63 is drawn to an electrical cartridge.

IIIe. Claim 64 is drawn to a tip.

III f. Claim 67 is drawn to the sleeve.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claim 59 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the



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examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

**IF APPLICANT ELECTS GROUP IV, THEN APPLICANT MUST ADDITIONALLY**

**ELECT ONE OF THE FOLLOWING:**

This application contains claims directed to the following patentably distinct species of the claimed invention:

IVa. Claim 69 is drawn to the storage.

IVb. Claims 70, 71, 73 are drawn to the vacuuming step.

IVc. Claims 74-75 are drawn to delay time.

IVd. Claim 76 is drawn to the monitoring step.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 68 and 72 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after

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the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

#### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 571-272-1177. The examiner can normally be reached on M-Th 7AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonathan Johnson  
Primary Examiner  
Art Unit 1725